COMMENT SET 14

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March 11, 2004

Mr. Eric L. Gillies
California State Lands Commission
100 Howe Ave. Suite 100-South
Sacramento, CA 95825-8202

Subject: Comments on DEIR Revised PRC-421 Pier Removal Project
SCH# 2001021119 January 2004

Dear Mr. Gillies:

It appears that very few members of the public have heard of the recent Revised PRC-421 Pier Removal Project, and those that have may be misled by the title as neither is it a pier, nor will it be removed – the residents of Ellwood know it as "Bird Island", and historically it has been referred to as such in the local media. The pier that was once there is long gone, and I doubt if there is anyone left who even remembers it. A more appropriate title would have been Revised PRC-421 Pier Removal Project – Toppling of Bird Island and Erection of New Artificial Roost" – if the project is revised significantly, why not revise the title – there are obviously no impacts from using a little more ink. I would not be surprised in the least if a lot of people react when they finally read about it in the papers and see a couple of photos. I haven't seen it on any local agendas, and although some agencies have responded and are on the mailing list, the public is still in the dark. **14-1**

I have spent some time with the document, and I have several questions, concerns, suggestions, and information that may change some of the impacts and mitigations. It also appears that there are several errors in the DEIR that I mentioned at the hearing. In the executive summary it still says that the columns will be removed (page 1-2), and then only later it says that they will be toppled in place and covered with quarry rock (page 1-9). On page 1-10 at the bottom it states that seven debris targets will be removed, yet five of them are rocks – natural formations (Appendix H, page 4). That error also occurs in section 3. **14-2**

I believe that the original plan for the site is the best – the complete clean up of the sea floor of all the remains of the past oil operations. There should be an opportunity for a final visual inspection when the water is clear. If possible, rather than remove any material that is suitable for an artificial reef, that material could be cleaned and placed at another site within the lease. That would reduce disposal costs and transportation emissions and provide some benefits to fishermen. Also, the new bird roosts could be **14-3**

placed there or at another location as recommended in the two pelican roost reports by Craig S. Strong. The bird roost could then be placed before the old structure is removed or toppled, thus allowing the birds to find the new roost. That would also leave more space on the barge for debris. It is also not clear why the pilings need rocks placed at their base. I have never seen rocks placed around pilings – their strength is achieved by proper depth in bedrock and for piers, a structure above water. Solitary pilings with large structures on top are probably rare in the open ocean – are there any along the California coast? The placement of the roosts shoreward of the hard rock substrate is also questionable – won't the decrease in depth have a shoaling effect and large waves may crest and break? All of these changes could be included in one or more alternatives – just look at all the alternatives that exist for the disposition of the shell mounds around the other old offshore oil platforms.

14-4

As I stated at the meeting it is not clear when and how much of the existing debris around the caissons will be removed. There are reports of debris fields and several beams on the seafloor in Appendix H. I asked a similar question in my letter of November 7, 2003 and the County also asked about "biota and/or shell mounds" in their letter of November 6, 2003. The response to my question was a curt reference to the 32 page section 3. Where precisely in that section does it mention that all of the surveyed debris will be removed? I was also told in a phone conversation that "everything" (except caissons) would be removed, but again, it is not made clear in section 3 when or how or even if those surveyed debris fields and old beams would be cleaned up before the toppling of the caissons. The caissons will fall down on any remaining debris and bury it deeper, and visibility will be poor for a while. If they are on a tight schedule, the caissons may be quickly checked that none are on top of another and then the quarry rock dumped – effectively burying any remaining debris forever. It will not be visible for the final inspection. It appears that in the current plan there is a very great possibility that a great deal of the existing surveyed debris and debris fields will not be removed. Where in the EIR is the mention of the long-term impacts of leaving those debris fields under the toppled caissons and quarry rock? Whatever the plan may be – whether all the surveyed debris is removed or some of it is buried under the new hard substrate, there are impacts. First, there may be considerable debris and it may take more time and work to clean it all up with a proper inspection before the caissons are toppled in which case there may be more short-term impacts, or if a lot of material is buried, there are the long-term impacts of the debris that may contain toxins. I would also assume that the remaining iron is not a good component of a clean artificial reef or a hard rock substrate as it rusts with time and has very sharp edges.

14-5

In the possible alternatives, instead of using explosives on all the upright caissons, is there a chance that some of them may be easily pushed or pulled over? Their reported deteriorated condition below the water line would seem to invite a simpler demolition.

14-6

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The use of a wreaking ball on the above water sections should also be considered as that would loosen a lot of the iron beams that could also be removed from the site rather than leaving them inside the cement caissons.

The bird roosts are a potential danger to low flying aircraft - there is a flight corridor along the coastline for both sightseeing as well as service helicopters to the platforms. The roosts are considerably higher that the existing structure and will not be visible at night or in fog. There are other reasons that they should be lower, including the fact that at 40 feet they will be in the full wind stream during a storm, and also they may vibrate and sway severely. Their natural period is probably long and may be driven both by the seas as well as the wind. There is quite a difference between the rock solid caisson structure and the very tall piers with heavy weights at the top when it comes to dynamics!

14-7

Sincerely,

David K. Sangster

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Dr. Ingrid Cox
Ken Curtis, City of Goleta

Commenting Party: David Sangster

Date of Comment(s): March 11, 2004

Responses to Comment(s):

14-1. Thank you for your observations about using the locally used term "Bird Island" to increase the recognition of the Proposed Project. Although the term was not used in the title of the Proposed Project, it was fully described in the Notice of Preparation published on October 9, 2003, which was distributed to agencies, organizations and individuals known to the CSLC to have an interest in the project. The Proposed Project was also fully described at the Scoping hearing for the Proposed Project EIR held at the Goleta Valley Community Center on October 30, 2003. The DEIR and Notice of Availability was provided to agencies, organizations and individuals known to the CSLC to have an interest in the project on January 27, 2004. The Notice of Availability, including notice of the hearing on the DEIR, was published in the Valley Voice and Santa Barbara News Press on January 30, 2004, and January 29, 2004, respectively and posted at the County of Santa Barbra Clerk of the Board of Supervisors Office on January 27, 2004. A public scoping hearing for the Proposed Project was held on February 18, 2004. These documents were also posted on the CSLC web site. All of these documents referenced above provided a project description that clearly identified that the Proposed Project includes removal of PRC-421 Pier remnants and construction of sea bird roosting/nesting platforms.

14-2. The references to removal of the caissons were contained in the DEIR for the "original project" and were inadvertently retained (please see errata pages).

The DEIR Introduction and Project Description states that seven debris targets identified by Fugro will be removed (there were actually 8). However, the Oceaneering report indicates that all targets except nos. 1, 7 and 8 are natural formations (see Appendix H, construction Dive Survey, if the DEIR). The DEIR text has been corrected to state that "using the same equipment, surveyors will inspect and document the removal and recovery of the seven all debris targets (nos. 1, 7 and 8) identified in the Fugro Seafloor Features Survey conducted on March 10, 1999, that were not subsequently identified as natural features by the Oceaneering Dive Survey (see Appendix H). This procedure will include a final confirmation for the record that target no's 2, 3, 4, 5 & 6 are not man-made, if they are, they will be removed." Please see errata pages for Sections 1.0 and 3.0.

14-3. Section 2.1, Background, on page 2-1 of the DEIR describes the genesis and purposes of the Proposed Project. As suggested, material suitable for an artificial reef will remain on site, resulting in fewer air quality impacts and subsequent benefits to marine organisms and fishermen. The May 28, 2002,

letter of comment by the California Department of Fish and Game on the DEIR for the original project (complete removal) states, "A preferable mitigation measure to address impacts to marine birds would be the construction of a new concrete roosting site close to the site of impact (in-kind, on-site)." BIO-5 on page 4.4-51 of the DEIR concludes, "roosting species will experience a short-term displacement during the period between demolition of the existing structure and the installation of the replacement habitat, approximately on month." As indicated, this period of displacement is not deemed significant.

14-4. Coastal structures in shallow water depths are exposed to wave orbital velocities from shorter period waves, which can cause scour and resulting damage to structures. Also, breaking waves can cause turbulence levels at the structure toe or base. Therefore, the rock at the base of the proposed bird roosting/nesting platforms is proposed to provide protection from scour as well as provide additional hardbottom substrate.

The roosting/nesting platform piles will be driven into the bedrock (weathered to competent Monterey formation) at the site as described in Section 3.4.5, Bird Roosting/Nesting Platform Construction of the DEIR. The design of the platforms developed by Bengal Engineers and included in ARCO's application to the CSLC, indicates that the piles will be embedded 25 feet into the seabed with a minimum of 20 feet into the hard layer. We are not aware of comparable structures anywhere else.

The effect of the Proposed Project on Coastal Processes is evaluated in Section 4.1, Geology and Coastal Process of the DEIR, specifically in GEO-5 (page 4.1-12) and GEO-7 (pages 4.1-14, 4.4-15). The project was determined not to have significant effects with respect to wave energy, alteration of coastal currents, and changes to nearshore sediment drift and beaches.

14-5. As indicated in Response to Comment 2, there appears to be three debris targets. Appendix H, Construction Dive Survey, of the DEIR identifies those targets as a crab trap, sheet pile and I-beams. Sections 1.0 and 3.0 of the DEIR have been revised to clarify that these three debris targets will be removed. The crab trap is located about 1,120 feet from the pier remnants, the sheet pile is located about 320 feet away and the I beams are within 20 feet of the pier remnants. Section 3.4.2, Toppling of Existing Caisson Structures, of the DEIR stated "Upon completing the removal of the topside structure and debris, divers will remove as much underwater debris as necessary to facilitate jetting and removal operations of the eight caissons and the 24 inch well conductor pipe." However, the applicant's project description in the CSLC application states that the debris in and around the columns will be retrieved prior to toppling of the columns. The DEIR text has been revised to provide this clarification (please see errata pages). Therefore, the possibility of burying any debris under the columns or quarry rock will be avoided. The inshore debris, consisting of the pier pilings,

will be removed after the columns are toppled because the barge will need to move inshore allowing crane reach to retrieve debris the divers cut. Section 3.4.7, Final Survey, of the DEIR explains that a survey will be conducted to ensure all debris targets have been removed. This section has been revised as described in Response to Comment 2 for clarification (please see errata pages).

14-6. The deterioration is severe as the concrete has fallen away from the interior steel beams exposing them to ultimate corrosion by the sea water. The steel is not brittle at this time. The use of linear shaped charges was determined to be the most precise method of severing the steel beams below the mudline while assuring maximum diver safety. Maintaining the integrity of the caisons will provide a more substantial base for the hardbottom substrate and avoid the scattering of smaller pieces of the concrete over the sea floor.

14-7. Federal Aviation Administration (FAA) Regulation Part 91.119 (Minimum safe altitudes) applies (partially quoted below):

Except when necessary for takeoff or landing, no person may operate an aircraft below the following altitudes:

(c) Over other than congested areas. An altitude of 500 feet above the surface, except over open water or sparsely populated areas. In those cases, the aircraft may not be operated closer than 500 feet to any person, vessel, vehicle, or structure.

(d) Helicopters. Helicopters may be operated at less than the minimums prescribed in paragraph (b) or (c) of this section if the operation is conducted without hazard to persons or property on the surface.

The platforms would be approximately 40 feet above the ocean surface with 460 feet clearance between them and the lowest altitude allowed by the FAA.

The platforms were designed to be above the predicted crest of the 100-year wave as a prudent engineering measure, as described in Section 3.4.5, Bird Roosting/Nesting Platform Construction of the DEIR. The use of 100-year conditions is required by many codes, such as the American Petroleum Institute (API), ABS, etc. A shorter structure would not be as transparent to the waves since the platforms would then be within the wave regime themselves. This would dramatically increase the forces on the pile and may render the minimalist structures infeasible.